

Technical Evaluation for Boiler Tubes & Main Steam Piping					Date:	
						Totals:
Company:						
Mandated Requirements (Either 1a or 1b is applicable)				Scoring		Weight
1a	<p>EN Materials: A valid (and current) certificate of conformity by a Third Party/Notified Body (in accordance with EN 764-5 (Clause 4) or AD 2000-Merkblatt W 0), to demonstrate that the material manufacturing plant has been audited and authorised as having a quality assurance system for material manufacture in accordance with PED 97/23/EC or 2014/68/EU (Pressure Equipment Directive), to produce the material grades and dimension ranges tendered for. This certificate should be accompanied by the Appendices containing all material, size ranges and harmonised standards approved. Where CE marking is available, the EU declaration of conformity for each product type (material grades and dimensions) tendered for</p>			Yes/No		
1b	<p>ASME Materials: A valid (and current) ASME Certificate of Authorisation by a Third Party/Notified Body (in accordance with ASME requirements), to demonstrate that the material manufacturing plant is an ASME Authorised Organisation that has been audited and authorised to produce the material grades and dimension ranges tendered for with the ASME Certification Mark. This certificate should be accompanied by the Appendices containing all material, size ranges and harmonised standards approved. Where ASME materials are approved for CE marking, the information required for EN Materials will also be acceptable for ASME materials. It will be mandatory to provide the name, address and contact number of the Third Party/Notified Body that carried out the conformity assessment upon contract award.</p>			Yes/No		
Qualitative Requirements					L2	L1

		Qualitative Technical Criteria Description Reference to Technical Specification / Tender Returnable Criteria Sub Weighting (%) Criteria Sub Weighting (%)	Reference to Technical Specification / Tender Returnable	Criteria Sub Weighting (%)	Criteria Sub Weighting (%)	
1	Details of manufacturing plant / previous history of supply:			20		
	1.1	Details of Manufacturing Plant: Formal business name of the manufacturing plant, street and postal address, contact names and telephone numbers of senior plant managers, along with their organisational roles. The manufacturing plant is the <i>site of manufacturing, inspection, testing, and release. If any activity is carried out at a different location or facility other than the main manufacturing plant, this shall be duly disclosed in the tender submission (showing clearly the scope/activities that will be done at a different plant location) and the same information shall be provided for the plant/site where other activities will be performed</i> .	100% = 5 80% = 4 40% = 2 Non responsive = 0		60	
	1.2	Previous History of Supply: A list of material manufactured at the plant, with particular regard to the materials required as part of the tender, shall be supplied. This should include a reference list with contact details of the end users, dates of delivery, material grade, dimensions, harmonised standards applied and tonnage.	100% = 5 80% = 4 40% = 2 Non responsive = 0		40	
2	Steel-making process			20		
	2.1	The foundries (if different from the material manufacturing plant) that will be used to supply cast billets for the manufacture of HP pipework and boiler tubing shall be listed in the tender returnable documents.	100% = 5 80% = 4 40% = 2 Non responsive = 0		20	
	2.2	The manufacturer shall provide Eskom (also in tender returnables) with a short technical description of its process to ensure the production of "clean" steel within the limits of this Standard. Raw material and scrap control by foundries must demonstrate low contamination levels with trace impurities and dangerous (i.e. poisonous and radioactive) elements. Only fully killed steels will be acceptable.	100% = 5 80% = 4 40% = 2 Non responsive = 0		40	

	2.3	Manufacturers shall also provide details of raw material suppliers along with relevant certification of the suppliers' quality management system/process, such as a valid or current ISO9001 certificate or comprehensive quality manuals (where an ISO certificate is not available). This information shall be provided with the tender submission	100% = 5 80% = 4 40% = 2 Non responsive = 0		40	
3	Heat Treatment			20		
	3.1	A valid or current calibration certificate(s) for the facilities used for the heat treatment shall be provided with the tender submission. The actual current calibration certificate for the Eskom order shall be furnished in the data books	100% = 5 80% = 4 40% = 2 Non responsive = 0		40	
	3.2	Loading of piping and tubing in the furnace shall be carried out to avoid non-uniform heating and cooling which could result in non-uniform material properties. A furnace packing plan and short description of heat treatment measures that are or will be in place in order to achieve this shall be included with the tender submission. Detailed procedures must be available for review during site audits by Eskom	100% = 5 80% = 4 40% = 2 Non responsive = 0		10	
	3.3	Suppliers must provide a short description of the heat treatment facilities and procedures to demonstrate how heat treatment will be controlled within parameters/requirements as evidence in the form of the latest heat treatment survey of the facilities. All calibration certificates and procedures must be made available for review by Eskom (when site visits are planned).	100% = 5 80% = 4 40% = 2 Non responsive = 0		10	
	3.4	The fully annotated heat treatment schedule for each material tendered for shall be supplied with the tender documents. The heat treatment schedule shall as a minimum contain methods of heating and cooling, heating and cooling rates, holding temperature ranges and holding times. These heat treatment schedule may be provided in the form of a schematic heat treatment dummy chart	100% = 5 80% = 4 40% = 2 Non responsive = 0		40	
4	Chemical composition			15		

	4.1	Declaration of compliance with chemical composition as per 240-87733094	Declaration submitted = 5 Non responsive = 0		60	
	4.2	Declaration of compliance with the adherence to the control of delta ferrite and the formulas governing it as per 240-87733094	Declaration submitted = 5 Non responsive = 0		40	
5	Creep Data			15		
	5.1	In line with the provisions of Appendix B of EN 12952-2, the material manufacturer shall furnish to Eskom verification of the creep test results for materials intended for operation in the creep range ($\geq 450^{\circ}\text{C}$). This requirement includes materials covered by both EN and ASME specifications. The creep tests results shall be based on tests conducted by the material manufacturer from heats of a given material produced from its own plant and procedures. The creep tests results shall be based on actual data for each material grade tendered for or quoted in tender returnable documents . The minimum test duration for the actual creep test shall be 40 000 hrs. The material manufacturer shall provide this data with the tender submission or provide a written declaration that the data exists and will be made available to Eskom personnel during a factory or site assessment or at any stage (when arrangements are made and communicated) prior to contract award.	Creep data/ Declaration submitted = 5 Non responsive = 0		100	
6	Certification			10		
	6.1	Declaration for compliance to Certification as per 240-87733094	Declaration submitted = 5 Non responsive = 0		100	